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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:

10/806,031

-Filing Date:

March 22, 2004

Applicant:

Koji HIGUCHI et al

Group Art Unit:

Not yet assigned

Examiner:

Not yet assigned

Title:

DROPLET EJECTION APPARATUS

Attorney Docket:

9319A-000736

Director of the United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant hereby submits an Information Disclosure Statement for consideration by the Examiner.

I. <u>LIST OF PATENTS, PUBLICATIONS, AND OTHER INFORMATION</u>

The patents, publications and other information requested to be considered by the Office (except unpublished U.S. patent applications) are listed on Form 1449 attached hereto.

II. COPIES

A.____ Submitted herewith is a legible copy of (i) each U.S. patent application publication and U.S. and foreign patent; (ii) each publication or that portion which caused it to be listed; (iii) for each cross-referenced pending U.S. application listed below in Section IV, the application specification including the claims, and any drawing of the application which caused it to be listed including the claims directed to that portion; and (iv) all other information or that portion which caused it to be listed.

B. ____ Any patents, publications or other information which are listed on Form 1449 or on the copies of PTO-892, but which are not enclosed herewith, were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. § 120:

- C. X Because the present application was/is being filed after June 30, 2003, no copies of the U.S. patents or U.S. patent application publications which are listed on the attached Form 1449 are enclosed pursuant to the waiver of 37 C.F.R. § 1.98(a)(2)(i). Any foreign patent documents or non-patent literature listed on the attached Form 1449 are enclosed herewith.
- D.____ This is a PCT application in the entry of the National Phase in the United States. A copy of the International Search Report is attached for the Examiner's information. The documents listed on the International Search Report are listed on the attached Form-1449 for consideration by the Examiner and for listing on any patent resulting from this application. If the International Search Report was from the US, EPO, or JPO search authorities, copies of these references should have been supplied to the USPTO under the trilateral agreement and are believed to be in the file of the above-identified application. (MPEP 1893.03(g))

III. CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)

- A._X_ Except as may be indicated below in (B), all of the patents, publications or other information are in the English language (concise explanation not required).
- B. \underline{X} A concise explanation of the relevance of each patent, publication or other information listed that is not in the English language is as follows (see 37 C.F.R. § 1.98(a)(3)):
 - 1. X See the attached foreign patent office communications from related foreign applications.
 - 2._X__English translations are provided as indicated on Form-1449.
- 3. X Other: European Patent Application No. 04004518.9 is based on related Japanese Patent Application No. 2003-055021; European Patent Application No. 04004519.7 is based on related Japanese Patent Application No. 2003-055020; International Application No. PCT/JP2004/002437 corresponds to U.S. Application No. 10/802,675 which claims priority to Japanese Application No. 2003-079202: International Application No. PCT/JP2004/002390 corresponds to U.S. Application No. 10/807,921 which claims priority to Application No. 2003-092934; International Application No. Japanese PCT/JP2004/002443 corresponds to U.S. Application No. 10/807,920 which claims priority to Japanese Application No. 2003-0092935; International Application No. PCT/JP2004/002414 corresponds to U.S. Application No. 10/824,335 which claims priority to Japanese Application No. 2003-112232; International Application No. PCT/JP2004/002400 corresponds to U.S. Application No. 10/806,030 which claims priority to Japanese Application No. 2003-088508; International Application No. PCT/JP2004/002401 corresponds to U.S. Application No. 10/797,595 which claims priority to Japanese Application International No. 2003-067382: Application No. PCT/JP2004/002405 corresponds to U.S. Application No. 10/806,031 which claims priority to Japanese Application No. 2003-088507; and International Application No.

PCT/JP2004/002403 corresponds to U.S. Application No. 10/797,594 which claims priority to Japanese Application No. 2003-067383.

C. ____The following additional information is provided for the Examiner's consideration.

IV. CROSS REFERENCE TO RELATED APPLICATION(S)

A._X_The Examiner is advised that the following co-pending application(s) contain(s) subject matter that may be related to the present application. By bringing this(these) application(s) to the Examiner's attention, Applicant(s) does(do) not waive the confidentiality provisions of 35 U.S.C. § 122.

| <u>Serial No.</u> | Filing Date | Art Unit |
|-------------------|----------------|----------|
| 10/802,675 | March 17, 2004 | N/A |
| 10/807,920 | March 24, 2004 | N/A |
| 10/797,595 | March 10, 2004 | N/A |
| 10/797,594 | March 10, 2004 | N/A |
| 10/806,030 | March 22, 2004 | 2852 |
| 10/824,335 | April 14, 2004 | N/A |
| 10/807,921 | March 24, 2004 | N/A |

V. THIS IDS IS BEING FILED UNDER

A._X_37 C.F.R. § 1.97(b): (check only one box)

- 1. ____ within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) (37 C.F.R. § 1.97(b)(1)). No fee or certification is required.
- 2. ____ within three months of the date of entry of the national stage as set forth in §1.491 in an international application (37 C.F.R. § 1.97(b)(2)). No fee or certification is required.
- 3. X before the mailing of a first Office Action on the merits (37 C.F.R. § 1.97(b)(3)). No fee or certification is required. In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97(c) and see the certification under 37 C.F.R. § 1.97(e) below; or, if no certification has been made, charge our deposit account a fee in the amount of \$180.00 as required by 37 C.F.R. § 1.17(p).
- 4. ____ before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No fee or certification is required.
- B. ____37 C.F.R. § 1.97(c): (check <u>ónly</u> one box)

before the mailing date of either any Final Office Action under 37 C.F.R. § 1.113, a Notice of Allowance under 37 C.F.R. § 1.311, or an action that otherwise closes prosecution.

- 1. ____No certification; therefore, a fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).
- 2. ____See the certification below. No fee is required.

C. ____37 C.F.R. § 1.97(d):

after the mailing date of either a Final Office Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, yet on or before payment of the issue fee.

1. ____See the certification below. A fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).

VI. <u>CERTIFICATION UNDER 37 C.F.R. § 1.97(e)</u>: (check <u>only</u> one box)

The undersigned hereby certifies that:

- A. ____ each item of information contained in this IDS was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(1)). See further statement under 37 C.F. R. 1.704(d) below in section VII, if applicable; or
- B. ____ no item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(2)).
- C. ____Some of the items of information were first cited in a communication from a foreign patent office. As to this information, the undersigned hereby certifies that each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby certifies that no item of this remaining information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS.

Page 4

Serial No. 10/806,031

VII. STATEMENT UNDER 37 CFR 1.704(d)

The undersigned hereby states that:

each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this IDS.

VIII. PAYMENT OF FEES (check only one box)

- A. ____ A check in the amount of \$180.00 is enclosed for the above-identified fee.
- B. ____Please charge Deposit Account No. 50-3213 in the amount of \$180.00 for the above-indicated fee. A duplicate copy of this paper is attached.

The above references are being cited only in the interest of candor and without any admission that they constitute statutory prior art, contain matter which anticipates the invention, or which would render the same obvious, either singly or in combination, to a person of ordinary skill in the art. Furthermore, this Information Disclosure Statement shall not be construed as a representation that a search has been made.

If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 50-3213.

Please charge any additional fees or credit any overpayment pursuant to 37 C.F.R. § 1.16 or § 1.17 to Deposit Account No. 50-3213.

Respectfully submitted,

Dated: October 14, 2004

By: // /wyh/ //// G. Gregory Schilley, Red

G/ Gregory Schilley, Reg. No. 27,38 Bryant E. Wade, Reg. No. 40, **3**44

HARNESS, DICKEY & PIERCE, P.L.C. P.O. Box 828 Bloomfield Hills, Michigan 48303 (248) 641-1600

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| TRANSMITTAL | |
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| FORM | |

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

| Application Number | 10/806,031 |
|------------------------|--------------------|
| Filing Date | March 22, 2004 |
| First Named Inventor | Koji HIGUCHI et al |
| Art Unit | Not yet assigned |
| Examiner Name | Not yet assigned |
| Attorney Docket Number | 9319A-000736 |

| | | ENCLOSU | RES (check all that apply) | , | | |
|--|--|---|--|--|---|--|
| Fee Transmittal F | Form | Drawing(s) | Drawing(s) | | ter Allowance Communication to echnology Center (TC) | |
| ☐ Fee Attached | j | Licensing-r | related Papers | | ppeal Communication to Board of opeals and Interferences | |
| Amendment / Re | ply | Petition | | | ppeal Communication to TC ppeal Notice, Brief, Reply Brief) | |
| After Final | | | Convert to a I Application | ☐ Pro | oprietary Information | |
| Affidavits/dec | claration(s) | | ttorney, Revocation Correspondence Address | ☐ Sta | atus Letter | |
| Extension of Time | e Request | Terminal D | isclaimer | | ther Enclosure(s) ease identify below): | |
| Express Abandor | nment Request | Request for Refund CD, Number of CD(s) | | Form HDP 1449; Copies of cited references (20); and Acknowledgment postcard. | | |
| Information Discle | osure Statement | | | | | |
| Certified Copy of Document(s) | ified Copy of Priority ument(s) | | fees that may be requ | ired unde | uthorized to charge any additional er 37 CFR 1.16 or 1.17 to Deposit cate copy of this sheet is enclosed. | |
| Response to Miss Incomplete Applic | | | | . rr aup | sale copy of the chock is cholected. | |
| Response to Parts under 3 1.52 or 1.53 | | | | | | |
| | SIGNA | TURE OF APP | PLICANT, ATTORNEY, C | R AGE | NT | |
| Firm <i>or</i> Individual name | Harmana Biskay & Biswas D.J. G. Gregor | | Attorney Name G. Gregory Schivley Bryant E. Wade | 0 | Reg. No. 27,382 40,344 | |
| Signature | 1. hoga Olivela | | | | | |
| Date | October 14, 2004 | | | | | |
| | CERTIFICATE OF TRANSMISSION/MAILING | | | | | |
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Typed or printed name

G. Gregory Schivley / Bryant E. Made

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Signature J. hugh Mindle Date October 14, 2004

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.8 C./22 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the SPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this ourden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1460, Alexandria, VA 22313-1450.

PTO/SB/21 (04-04)

Approved for use through 07/31/2006, OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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TRANSMITTAL **FORM**

(to be used for all correspondence after initial filing)

Alexandria, VA 22313-1450 on the date shown below.

G. Gregory Schrivley / Bryant E. Wade

Typed or printed name

Signature

| Application Number | 10/806,031 |
|------------------------|--------------------|
| Filing Date | March 22, 2004 |
| First Named Inventor | Koji HIGUCHI et al |
| Art Unit | Not yet assigned |
| Examiner Name | Not yet assigned |
| Attorney Docket Number | 9319A-000736 |

| Total Number of Pages | s in This Submission | At | torney Docket Numb | er 931 | 19A-000736 | |
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| | | ENCLOSUF | RES (check all that ap | ply) | • | |
| Fee Transmittal F | Form | Drawing(s) | | | After Allowance Communication to Technology Center (TC) | |
| Fee Attached | i | Licensing-re | elated Papers | | Appeal Communication to Board of Appeals and Interferences | |
| Amendment / Rep | ply · | Petition | | | Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) | |
| After Final | | | Convert to a Application | | Proprietary Information | |
| Affidavits/dec | claration(s) | | ttorney, Revocation Correspondence Addre | ess 🗆 | Status Letter | |
| Extension of Time | e Request | Terminal D | isclaimer | ⊠ | Other Enclosure(s) (please identify below): | |
| Express Abandonment Request | | Request for Refund CD, Number of CD(s) | | | Form HDP 1449; Copies of cited references (20); and Acknowledgment postcard. | |
| Information Discl | osure Statement | | | | | |
| Certified Copy of Document(s) | Priority | Remarks | fees that may be | e required u | y authorized to charge any additional nder 37 CFR 1.16 or 1.17 to Deposit plicate copy of this sheet is enclosed. | |
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| | SIGNA | TURE OF APP | LICANT, ATTORNE | Y, OR AG | ENT | |
| Firm or Harness, Dickey & Pi | | Pierce, P.L.C. | Attorney Name G. Gregory Schivley Bryant E. Wade | | Reg. No. 27,382 40,344 | |
| Signature | 1. hom Olivela | | | | | |
| Date | October 14, 2004 | / / / | Y / | 0 | | |
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| I hereby certify that t Service with sufficient | this correspondence | is being facsimil | e transmitted to the US envelope addressed | SPTO or de | eposited with the United States Postal ssioner for Patents, P.O. Box 1450, | |

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October 14, 2004



FORW HDP-1449 (Based on Form PTO-1449)

PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Sheet 1 of 2

| ATTORNEY DOCKET NO. SERIAL NO. | | | |
|--------------------------------|-------|--|--|
| 9319A-000736 10/806,031 | | | |
| APPLICANT | | | |
| Koji HIGUCHI et al. | | | |
| FILING DATE | GROUP | | |
| March 22, 2004 Not yet assign | | | |

| U.S. P | ATENT DO | CUMENTS | · · · · · · · · · · · · · · · · · · · | | | |
|----------------|------------------------|--------------------|---------------------------------------|---------------|--------------------|---------------------------------|
| Ref. Desig. | Examiner's Initials | Document Number | Date | Name | Class/ Subclass | (If appropriate) Filing Date |
| 1. | | 2002-089562 | 7/11/2002 | Simons et al. | | |
| 2. | | 4,034,380 | 7/5/1977 | Isayama | | |
| 3. | | 6,375,299 | 4/23/2002 | Foster et al. | | |
| 4. | | 5,818,473 | 10/6/1998 | Fujii et al. | | |
| 5. | | 5,500,657 | 3/19/1996 | Yauchi et al. | | |

| FORE | IGN PATEN | T DOCUMENTS | - | | | · | |
|----------------|------------------------|--------------------|------------|---------|--------------------|-----------------|---------|
| Ref. Desig. | Examiner's Initials | Document Number | Date | Country | Class/ Subclass | Translation Yes | * No |
| 1. | | EP 1211078 | 6/5/2002 | Europe | | N/A | - |
| 2. | | EP 1147900 | 10/24/2001 | Europe | | N/A | - |
| 3. | | EP 0933215 | 8/4/1999 | Europe | | N/A | |
| 4. | | 63-141750 | 6/14/1988 | Japan | | Abstract | |
| 5. | | 11-334102 | 12/7/1999 | Japan | | Х | |
| 6. | | 02-003323 | 1/8/1990 | Japan | | Abstract | |
| 7. | | 2000-272116 | 10/3/2000 | Japan | | Х | |
| 8. | | 2002-187263 | 7/2/2002 | Japan | | Abstract | |
| 9. | | 08-309963 | 11/26/1996 | Japan | | Х | |
| 10. | | 2000-351204 | 12/19/2000 | Japan | | Х | |
| 11. | | 06-122206** | 5/6/1994 | Japan | | X | |

| Examiner: | Date Considered: |
|-----------|------------------|
| | |

FORM HDP-1449 (Based on Form PTO-1449)

PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Sheet 2 of 2

| ATTORNEY DOCKET NO. | SERIAL NO. |
|---------------------|------------------|
| 9319A-000736 | 10/806,031 |
| APPLICANT | |
| Koji HIGUCHI et al. | |
| FILING DATE | GROUP |
| March 22, 2004 | Not yet assigned |

| OTHE | R DOCUME | NTS (including Author, Title, Date, Pertinent Pages, etc.) |
|----------------|---------------------|--|
| Ref. Desig. | Examiner's Initials | |
| 1. | | Communication from European Patent Office re: counterpart application No. 04004519.7 |
| 2. | | Communication from European Patent Office re: counterpart application No. 04004518.9 |
| 3. | | Communication from PCT re: corresponding International Application No. PCT/JP2004/002401 |
| 4. | | Communication from PCT re: corresponding International Application No. PCT/JP2004/002405 |
| 5. | | Communication from PCT re: corresponding International Application No. PCT/JP2004/002400 |
| 6. | | Communication from PCT re: corresponding International Application No. PCT/JP2004/002403 |
| 7. | | Communication from PCT re: corresponding International Application No. PCT/JP2004/002414 |
| 8. | | Communication from PCT re: corresponding International Application No. PCT/JP2004/002390 |
| 9. | | Communication from PCT re: corresponding International Application No. PCT/JP2004/002437 |
| 10. | | Communication from PCT re: corresponding International Application No. PCT/JP2004/002443 |

^{*}One or more of the English translation documents submitted herewith may be Abstracts only or partial machine created translations from the Japanese Patent Office. As such, the submitter does not necessarily vouch for their accuracy. Additional information may be obtained from the Japanese Patent Office web site at www.ipo.go.ip

| Examiner: | Data Canaidanadi |
|-----------|------------------|
| Examiner. | Date Considered: |
| | |

^{**} Previously Submitted